

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554**

In the Matter of)	
)	
Improving Spectrum Efficiency Through)	WT Docket No. 12-64
Flexible Channel Spacing and Bandwidth)	
Utilization for Economic Area-based 800)	
MHz Specialized Mobile Radio Licensees)	
)	
Request for Declaratory Ruling that the)	WT Docket No. 11-110
Commission's Rules Authorize Greater)	
than 25 kHz Bandwidth Operations in the)	
817-824/862-869 MHz Band)	

REPLY COMMENTS OF SPRINT NEXTEL CORPORATION

The commenters in this proceeding overwhelmingly support the Commission's proposal to eliminate outdated legacy channel spacing and bandwidth limitations for Economic Area (EA)-based 800 MHz band Enhanced Specialized Mobile Radio (ESMR) service licensees.¹ Indeed, *no* party opposes granting ESMR licensees the flexibility to deploy wideband and broadband technologies in the 800 MHz band. The record shows that this flexibility will greatly benefit consumers without increasing the risk of harmful interference to public safety licensees.

I. THERE IS STRONG SUPPORT FOR AMENDING THE COMMISSION'S RULES ON AN EXPEDITED BASIS TO GIVE ESMR LICENSEES THE FLEXIBILITY TO DEPLOY WIDEBAND AND BROADBAND TECHNOLOGIES

A broad range of parties expressed strong support for the *Notice's* proposal to update the Commission's rules to provide ESMR licensees discretion over the channelization and network technologies deployed in their spectrum. For example, SouthernLINC Wireless and RCA – the Competitive Carriers Association, explained how this flexibility will allow ESMR licensees to

¹ *Improving Spectrum Efficiency Through Flexible Channel Spacing and Bandwidth Utilization for Economic Area-based 800 MHz Specialized Mobile Radio Licensees*, WT Docket No. 12-64, Notice of Proposed Rulemaking, FCC 12-25 (rel. March 9, 2012) (*Notice*).

deploy new technologies to meet the growing consumer demand for broadband service. As SouthernLINC stated in its comments, “the sooner the Commission acts to allow wideband operations in the 800 MHz ESMR band, the sooner 800 MHz ESMR licensees can invest in the widespread deployment of advanced technologies and bring new, competitive wireless services to consumers.”² RCA’s comments pointed out that the proposals in the *Notice* “will increase the [ESMR] spectrum’s efficiency and the carriers’ coverage and capacity, to consumers’ benefit.”³

Representatives of technology companies and equipment manufacturers similarly recognize the public interest benefits of modernizing the technical rules governing ESMR licensees. Motorola Solutions, Inc. (MSI) filed comments supporting the proposal in the *Notice*, stating that as “a general matter . . . licensees should be afforded maximum flexibility in the use of their exclusively licensed spectrum.”⁴ MSI observed that the proposals in the *Notice* “strike the right balance” by promoting ESMR licensee flexibility while at the same time proposing safeguards to protect against interference to 800 MHz public safety systems.⁵ The Telecommunications Industry Association (TIA) stated in its comments that the rule changes in the *Notice* will “further the Government’s interest in more efficient use of spectrum by facilitating greater, more productive uses of limited spectrum resources” and “will be a boon to innovation in wireless services and devices.”⁶

² Comments of SouthernLINC Wireless at 2 (SouthernLINC Comments). Southern Company Services, Inc., a utility company and an affiliate of SouthernLINC, also filed comments explaining how the technical flexibility proposed in the *Notice* will enhance communications services for the utility industry. Comments of Southern Company Services, Inc. at 3. (Unless otherwise indicated, all filings referenced in these reply comments were filed in WT Docket No. 12-64 on April 13, 2012.)

³ Comments of RCA – The Competitive Carriers Association at 2.

⁴ Comments of Motorola Solutions, Inc. at 3 (MSI Comments).

⁵ *Id.*

⁶ Comments of the Telecommunications Industry Association at 3 (TIA Comments).

No commenter questioned these substantial competitive and consumer benefits. These benefits provide a strong public interest basis for the Commission to provide ESMR licensees the greater technical flexibility proposed in the *Notice*. The existing channel spacing and bandwidth limitations set forth in the Commission's ESMR rules are outdated obstacles to investment and new technologies. Moreover, as AT&T stated in its comments, "petitions of this nature, which seek to improve spectral efficiency through changes to existing technical rules, merit expedited consideration by the Commission."⁷ Accordingly, the Commission should act quickly in issuing a Report and Order adopting the proposals set forth in the *Notice*.

II. THE RECORD SHOWS THAT PROVIDING ESMR LICENSEES GREATER TECHNICAL FLEXIBILITY WILL NOT INCREASE THE RISK OF INTERFERENCE TO PUBLIC SAFETY SYSTEMS

As Sprint Nextel demonstrated in its prior filings, affording ESMR licensees flexibility over the channelization used in their networks will not increase the risk of harmful interference to other 800 MHz licensees, including public safety licensees. Sprint Nextel agrees that the two conditions proposed in the *Notice* (*i.e.*, (1) restricting greater than 25 kHz channel deployments in the 821-824/866-869 MHz former NPSPAC channels until reconfiguration is completed within a NPSPAC region, and (2) requiring prior notice to potentially affected incumbent public safety licensees before an EMSR licensee initiates broadband service) will provide additional assurance that deploying greater channel bandwidth flexibility does not increase the risk of Commercial Mobile Radio Service (CMRS) – public safety interference.⁸

⁷ Comments of AT&T at 1.

⁸ *Notice* ¶¶ 13-14 (proposing to permit EA-based SMR licensees to exceed channel spacing and bandwidth limits in the 813.5-824/858.5-869 MHz band in areas where band reconfiguration is complete but only in the 813.5-821/858.5-866 MHz band in areas where reconfiguration is incomplete).

Many of the commenters agreed that the *Notice* strikes the right balance in protecting public safety licensees against interference.⁹ Similarly, the Association of Public-Safety Communications Officials-International, Inc. (APCO) filed comments stating that it “supports the proposals in the” *Notice*,¹⁰ provided that in NPSPAC regions that include U.S. – Mexican border areas, the 30-day notice requirement extend to all public safety licensees in the relevant border area. Sprint Nextel does not oppose that additional notice requirement. APCO also suggests that ESMR licensees provide public safety licensees receiving such notice with a 24-hour contact number to reach in the event interference occurs and that ESMR licensees take immediate steps to terminate interfering operations.¹¹ In that regard, Sprint notes that the 24-hour CMRS – public safety interference reporting web site maintained by the Cellular Telecommunications Industry and Internet Association (CTIA) already provides such ‘round-the-clock’ reporting capability and that the Commission’s rules impose immediate investigation and mitigation obligations on ESMR and other CMRS operators.¹²

⁹ See MSI Comments at 4 (“Because the proposals in the *Notice* will afford greater flexibility of use to 800 MHz ESMR licensees while also providing appropriate protections to public safety operations, MSI supports those proposals.”); Comments of TIA at 4 (supporting proposal and stating that the “conditions placed on EA-based licensees’ ability to exceed the channel spacing requirements are appropriate and fair to ensure the ability of public safety licensees to continue to provide reliable service”); Comments of SouthernLINC at 11 (“the conditions proposed by the Commission will be more than sufficient to ensure continued interference protection for 800 MHz public safety licensees”).

¹⁰ Comments of APCO at 2-3 (APCO Comments).

¹¹ *Id.* at 3.

¹² See 47 C.F.R. §§ 90.673-90.674; see also “800 MHz Interference Notification Site,” available at: <<http://www.publicsafety800mhzinterference.com/CTIAWeb/>> (viewed Apr 23, 2012). APCO also recommends that the Commission clarify that the proposed ESMR channelization flexibility does not apply to the 813.5-817/858.5-862 MHz band except in the southeastern United States where that spectrum is currently allocated for EA-based ESMR operations. APCO Comments at 2. Sprint believes that the proposed clarification accurately reflects the Commission’s ESMR allocation for the southeastern United States.

A group of nine public safety licensees (Joint Commenters) filed joint comments expressing qualified support for the proposals in the *Notice*.¹³ The Joint Commenters made clear that they “support a Commission policy that permits licensees of exclusive, contiguous Part 90 channels to combine their frequency allocations and utilize equipment which spans all or part of the combined bandwidth.”¹⁴ They appeared to express concern, however, regarding public safety licensees operating within 1 MHz of the ESMR band in areas (*i.e.*, the Canadian border area and the southeastern region where SouthernLINC operates) in which the Commission previously chose not to establish a Guard Band between the ESMR block and band segments in which public safety systems may operate post-800 MHz reconfiguration.¹⁵

Sprint Nextel respectfully submits that the concerns raised by the Joint Commenters are misplaced. The Commission concluded years ago, in separate rulemaking proceedings, that 800 MHz spectrum constraints make it impossible to establish a Guard Band in the Canadian border regions and in the southeastern United States.¹⁶ Thus the Joint Commenters are not raising a

¹³ Joint Comments of Public Safety Licensees (Joint Comments). Of the nine public safety jurisdictions who make up the Joint Commenters, four licensees have completed their main infrastructure retuning work and are fully operating on their replacement channels provided for and paid for by Sprint Nextel (Denver, Durham, Apopka, and Orange County). Two other licensees are still in the midst of retuning their systems (Franklin and Mobile), while three licensees, all in the U.S. – Canadian Border Area, have yet to negotiate Frequency Reconfiguration Agreements (FRAs) (Oakland, Genesee and Orleans) or begin retuning to their new channel assignments. Each of these three Border Area licensees was originally required to complete their retunes by April 2011.

¹⁴ Joint Comments at 9.

¹⁵ *Id.* at 6-7.

¹⁶ *Improving Public Safety Communications in the 800 MHz Band*, Report and Order, Fifth Report and Order, Fourth Memorandum Opinion and Order, 19 FCC Rcd 14969, ¶ 166 (2004); *Improving Public Safety Communications in the 800 MHz Band*, Second Report and Order, 23 FCC Rcd 7605, ¶18 (PSHSB 2008) (*Canadian Border Region Order*).

new interference issue at all; their assertions amount to a collateral attack – or an untimely request for reconsideration – of well-settled Commission band reconfiguration decisions.¹⁷

The record in this proceeding demonstrates that the rule revisions proposed in the *Notice* will not increase the risk of interference to public safety or other land mobile licensees at 800 MHz, including in regions where the Commission has previously decided not to allocate spectrum for a guard band between ESMR channels and non-ESMR 800 MHz land mobile channels. The Joint Commenters point to no evidence to the contrary. Despite the Commission’s admonition in the *Notice* that parties raising interference concerns back up their arguments “with specificity, including any relevant data supporting such claims,”¹⁸ the Joint Commenters offer only conclusory, generalized assertions. These assertions in no way rebut the detailed engineering studies Sprint has filed in this proceeding demonstrating that ESMR channelization flexibility will not increase the risk of either out-of-band emissions (OOBE) or intermodulation interference.¹⁹ As indicated in those studies, Sprint has imposed extremely tight OOBE filtering requirements on its base station vendors to ensure that wideband and broadband 800 MHz operations will create no greater risk of interference to 800 MHz public safety communications than would occur from its post-reconfiguration Motorola Mobile iDEN® network operations. Those requirements, which are significantly more stringent than the FCC’s

¹⁷ Indeed, in a separate adjudicatory proceeding, the Commission staff has just recently rejected an effort by one of the Joint Commenters to overturn the Commission staff’s prior rulemaking decision regarding how to apportion non-ESMR and ESMR channels in Canadian border areas where there is no Guard Band, stating that this party’s argument was “not cognizable . . . because it seeks untimely reconsideration” of the prior rulemaking decision. *County of Genesee, New York and Sprint Nextel Corp.*, WT Docket No. 02-55, Order on Reconsideration, DA 12-624, ¶ 16 (rel. April 20, 2012).

¹⁸ *Notice* ¶ 15.

¹⁹ See, e.g., Reply Comments of Sprint Nextel Corp., WT Docket No. 11-110, at 8-9 and Exhibits A and B (Aug. 16, 2011).

existing requirements, were developed based on the performance of special filtering that was developed for post-rebanding iDEN® use, and which has been used successfully during band reconfiguration to limit iDEN® interference to public safety and other non-cellular licensees.

Moreover, retuning a public safety licensee to new channels within 1 MHz of the ESMR channel block will happen infrequently. Most NPSPAC regions have both an Expansion Band and a Guard Band. Even in regions lacking a Guard Band, the 800 MHz Transition Administrator works with all parties to maximize the spectral separation between public safety licensees and ESMR operators. Indeed, only two of the Joint Commenters have channels being relocated to within 1 MHz of the ESMR band in the Canadian border area.²⁰

As described above, the deployment of wideband or broadband ESMR systems will not increase the risk of harmful interference to non-ESMR licensees. In the unlikely event an interference incident occurs, however, public safety licensees will have received prior notice of the deployment as required by the proposed condition in the *Notice*, along with an ability to immediately contact all ESMR and cellular operators to investigate, and the ESMR licensee will be required to follow the strict abatement procedures set forth in the Commission's rules.²¹ The Commission has made clear that these procedures, and the obligation to protect public safety systems against interference, will apply in regions lacking a Guard Band where a public safety

²⁰ See Joint Comments at 2-5. Another party joining in the Joint Comments, the City and County of Durham, North Carolina, operates a secondary use public safety Vehicular Repeater System which is being reconfigured to channels in the 800 MHz Guard Band that will be in close proximity to Sprint Nextel's ESMR operations. Those replacement channels were selected to accommodate the requirements of that system and were agreed to by the City and Country of Durham. The Joint Commenters make no particular argument about this fact nor do they provide any technical or empirical showing that Sprint Nextel's or any other ESMR's intended technology changes will increase the potential risk of interference.

²¹ See 47 C.F.R. §§ 90.673-90.674. Interference to 800 MHz public safety systems can also, of course, be caused by A and B Block cellular licensees operating above 824 MHz. These licensees are also subject to the Commission's interference abatement procedures.

licensee is retuned to replacement channels within 1 MHz of the ESMR band.²² Thus, the concerns expressed by the Joint Commenters have already been addressed by the Commission and do not warrant any further attention in this proceeding.

III. CONCLUSION

Sprint Nextel filed its petition seeking flexibility to deploy greater than 25 kHz channel technologies on the 800 MHz ESMR spectrum almost one year ago. The Commission has now sought two rounds of comment on allowing this flexibility, first through a June 2011 Public Notice and now through the March 2012 *Notice*. The record is complete and it provides overwhelming support for amending the Commission's rules as proposed in the *Notice*. The proposed rule revisions will effectuate the intent of the Commission's 1995 rulemaking concluding that ESMR licensees should have "full discretion over channelization of available

²² *Canadian Border Region Order* ¶ 18 ("[U]pon completion of rebanding in each border region, licensees operating in the non-ESMR portion of the band . . . will be entitled to full interference protection from Sprint's ESMR operations under the same post-rebanding interference standard that applies outside the border regions.").

spectrum within” their EA-licensed spectrum blocks.²³ The Commission should act expeditiously to issue a Report and Order granting this flexibility to ESMR licensees.

Respectfully submitted,

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²³ *Amendment of Part 90 of the Commission’s Rules to Facilitate Future Development of SMR Systems in the 800 MHz Frequency Band*, First Report and Order, Eighth Report and Order, and Second Further Notice of Proposed Rulemaking, 11 FCC Rcd 1463, ¶ 3 (1995).